# TECHNICAL MEMORANDUM
## COST BENEFIT ANALYSIS
### City of Coon Rapids, MN

Progressive Consulting Engineers will complete a cost benefit analysis addressing the costs associated with treating, pumping, storing and delivering water to the City of Coon Rapids consumers. The cost benefit analysis will entail:

1. Determine potential cost saving by idling the East Plant during the low flow (winter) months
    a) Contact the filter vendor to identify the impact on the treatment units by idling them and the length of time they can be idled
    b) Identify and determine potential cost savings

2. Determine the cost savings associated with meeting water demands by operation of the water towers in a manner that would facilitate reduction of East Plant effluent into the distribution system during high demands
    a) Determine 3 – 5 – 10day maximum average water demands over a minimum of a 10 year period
    b) Determine the cost for
        1) Increasing the East Plant effluent to meet peak demands
        2) Utilizing storage to reduce the East Plant effluent by constructing a 2 million gallon tower

3. Determine the pumping cost savings of filling the water towers during off peak times at off peak electric rates
    a) Assess the ability of the water system to meet daytime demands and facilitate filling of the towers during off peak
    b) Determine electrical cost differential between pumping on peak and off peak

4. Identify other potential cost savings of constructing a new 2 million gallon water tower
    a) Because of potential tower location, revenue from cell phone companies for antenna installation on tower
    b) Potential reduction in water main breaks due to lower system pressure due to water distribution pattern change due to tower location
    c) Identify other potential cost savings

5. Submit an electronic copy of a Technical Memorandum outlining the results of the cost benefit analysis to the City